#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Atty. Docket:

Srinivas GUTTA US010572

Serial No.: 10/014,202 Group Art Unit: 3622

Filed: November 13, 2001 Examiner: Daniel Lastra

Title: METHOD AND APPARATUS FOR RECOMMENDING ITEMS OF INTEREST BASED ON PREFERENCES OF A SELECTED THIRD PARTY

Mail Stop **APPEAL BRIEF - PATENTS**Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

# BRIEF ON APPEAL UNDER 37 C.F.R. 41.37(c)

Sir:

This is an appeal from the decision of the Examiner dated 08 September 2006, finally rejecting claims 1 and 3-23 of the subject application.

This paper includes (each beginning on a separate sheet):

- 1. Appeal Brief;
- 2. Claims Appendix;
- 3. Evidence Appendix; and
- 4. Related Proceedings Appendix.

## **APPEAL BRIEF**

#### I. REAL PARTY IN INTEREST

The above-identified application is assigned, in its entirety, to **Koninklijke**Philips Electronics N. V.

### **II. RELATED APPEALS AND INTERFERENCES**

Appellant is not aware of any co-pending appeal or interference that will directly affect, or be directly affected by, or have any bearing on, the Board's decision in the pending appeal.

### **III. STATUS OF CLAIMS**

Claim 2 is canceled.

Claims 1 and 3-23 are pending in the application.

Claims 1 and 3-23 stand rejected by the Examiner under 35 U.S.C. 102(b).

These rejected claims are the subject of this appeal.

## **IV. STATUS OF AMENDMENTS**

Subsequent to the final rejection, Appellant filed a response on November 8, 2006, amending claims 1, 7, 14, 17-18, and 22 and adding new claim 24. The claim amendments were entered according to the Advisory Action dated November 30, 2006. On December 8, 2006, Appellant submitted a Pre-Appeal Brief Request.

In response, the Office issued a decision and a second Advisory Action dated January 25, 2007 indicating that the amendments to claims 1, 7, 14, 17-18, and 22 and addition of new claim 24 would not be entered because additional claims were presented.

Appellant resubmitted amendments to claims 1, 7, 14, 17-18, and 22 on February 9, 2007 without adding any new claims. The Examiner issued an Advisory Action on March 7, 2007 and entered the amendments to claims 1, 7, 14, 17-18, and 22.

## V. SUMMARY OF CLAIMED SUBJECT MATTER

The claimed subject matter of the present application is generally directed toward a method and apparatus for recommending items of interest (e.g., television programs, etc) to a user based on selection history (e.g., viewing history, purchase history, etc) of a third party. The third party selection history is partitioned into a set of clusters. A user can select one or more clusters from the partitioned third party viewing history to modify the user's own viewing history. The user's own modified viewing history is processed to generate a user profile that characterizes viewing preferences of the user. Thus, the generated user profile reflects viewing preferences of the third party.

Independent claim 1 recites a computerized method (Fig. 1; pg. 6, lines 14-17; Figs. 5-6) performed by a data processor (Fig. 1, processor 115) for

recommending one or more available items to a target user (pg. 3, lines 13-14; pg. 5, lines 3-4), comprising the steps of:

obtaining a history of selecting one or more available items by at least one third party (pg. 3, lines 16-17; pg. 5, lines 17-21; Fig. 1);

partitioning a third party selection history into a plurality of clusters (pg. 3, lines 16-19 and 23-26; pg. 5, lines 17-21; pg. 7, lines 16-17; pg. 8, lines 8-11; pg. 9, lines 28-30; Fig. 5), wherein each cluster contains items that are closer to the mean of the cluster than any other cluster from among the plurality of clusters (pg. 3, lines 25-26; pg. 7, lines 17-19; p. 9, lines 28-33);

modifying a target user's history of selecting said one or more available items with one or more third party clusters to produce a modified target user's history (pg. 3, lines 26-30; pg. 5, lines 30-34; pg. 6, lines 1-13; pg. 7, lines 19-23; pg. 12, lines 17-32; pg. 13, lines 1-17; Fig. 4A, Fig. 6);

processing the modified target user's history to generate a target user profile (pg. 3, lines 30-31; pg. 9, lines 11-19; Fig. 4B), wherein the modified target user's history characterizes preferences of the target user as modified to reflect preferences of the third party (pg. 3, lines 31-33);

generating a recommendation score for at least one of said available items based on said target user's profile (pg. 4, lines 1-3; pg. 14, lines 1-9; Fig. 1, program recommendations 150); and

displaying the recommendation score to the target user (pg. 14, lines 9-12).

Independent claim 7 recites a computerized method (Fig. 1; pg. 6, lines 14-17; Figs. 5-6) performed by a data processor (Fig. 1, processor 115) for maintaining a user profile indicating preferences of a user, comprising the steps of:

partitioning a third party selection history into a plurality of clusters (pg. 3, lines 16-19 and 23-26; pg. 5, lines 17-21; pg. 7, lines 16-17; pg. 8, lines 8-11; pg. 9, lines 28-30; Fig. 5), wherein each cluster contains items that are closer to the mean of the cluster than any other cluster from among the plurality of clusters (pg. 3, lines 25-26; pg. 7, lines 17-19; p. 9, lines 28-33),

receiving a selection from said user of at least one of said clusters of similar items (pg. 3, lines 26-30; pg. 5, lines 30-34; pg. 6, lines 1-13; pg. 7, lines 19-23; pg. 12, lines 17-32; pg. 13, lines 1-17; Fig. 6); and

modifying said user profile using said user selected clusters (pg. 3, lines 26-30; pg. 5, lines 30-34; pg. 6, lines 1-13; pg. 7, lines 19-23; pg. 12, lines 17-32; pg. 13, lines 1-17; Fig. 4A, Fig. 6).

Independent claim 14 recites a system for recommending one or more available items (pg. 6, lines 14-34), comprising:

a memory (Fig. 1, memory 120) for storing computer readable code; a processor (Fig. 1, processor 115) operatively coupled to said memory (Fig.

- 1), said processor configured to:
- (1) obtain a history of selecting one or more available items by at least

one third party (pg. 3, lines 16-17; pg. 5, lines 17-21; Fig. 1);

- (2) partitioning a third party selection history into a plurality of clusters (pg. 3, lines 16-19 and 23-26; pg. 5, lines 17-21; pg. 7, lines 16-17; pg. 8, lines 8-11; pg. 9, lines 28-30; Fig. 5), wherein each cluster contains items that are closer to the mean of the cluster than any other cluster from among the plurality of clusters (pg. 3, lines 25-26; pg. 7, lines 17-19; pg. 9, lines 28-33);
- (3) selecting one or more clusters from the third party selection history (pg. 3, line 27; pg. 5, lines 30-31; pg. 6, lines 6-7; pg. 7, lines 20-21; pg. 8, lines 20-21; pg. 12, lines 20-22, 31-32);
- (4) modifying the target user's history of selecting said one or more available items with said selected one or more clusters from the third party selection history to produce a modified target user's history (pg. 3, lines 26-30; pg. 5, lines 30-34; pg. 6, lines 1-13; pg. 7, lines 19-23; pg. 12, lines 17-32; pg. 13, lines 1-17; Fig. 4A, Fig. 6);
- (5) processing the modified target user's history to generate a target user profile (pg. 3, lines 30-31; pg. 9, lines 11-19; Fig. 4B), wherein the modified target user's history characterizes preferences of the target user as modified to reflect preferences of the third party (pg. 3, lines 31-33);
- (6) generating a recommendation score for at least one of said available items based on said target user's profile (pg. 4, lines 1-3; pg. 14, lines 1-9; Fig. 1, program recommendations 150); and
  - (7) displaying the recommendation score to the target user (pg. 14,

Independent claim 17 recites a system for recommending one or more available items (pg. 6, lines 14-34), comprising:

means (100, 115) for obtaining a history of selecting one or more available items by at least one third party (pg. 3, lines 16-17; pg. 5, lines 17-21; Fig. 1; processor 115);

means (100, 115) for partitioning the at least one third party selection history into a plurality of clusters (pg. 3, lines 16-19 and 23-26; pg. 5, lines 17-21; pg. 7, lines 16-17; pg. 8, lines 8-11; pg. 9, lines 28-30; Fig. 5), wherein each cluster contains items that are closer to the mean of the cluster than any other cluster from among the plurality of clusters (pg. 3, lines 25-26; pg. 7, lines 17-19; p. 9, lines 28-33),

means (100, 115) for modifying a target user's history of selecting said one or more available items with at least one cluster selected from the plurality of clusters comprising the third party selection history to produce a modified target user's history (pg. 3, lines 26-30; pg. 5, lines 30-34; pg. 6, lines 1-13; pg. 7, lines 19-23; pg. 12, lines 17-32; pg. 13, lines 1-17; Fig. 4A, Fig. 6);

means (100, 115) for processing the modified user's history to generate a target user profile (pg. 3, lines 30-31; pg. 9, lines 11-19; Fig. 4B), wherein the modified target user's history characterizes preferences of the target user as modified to reflect preferences of the third party (pg. 3, lines 31-33);

means (100, 115) for generating a recommendation score for at least one of said available items based on said target user's profile as modified by said third parties' history (pg. 4, lines 1-3; pg. 14, lines 1-9; Fig. 1, program recommendations 150);

means for displaying the recommendation score to the target user (pg. 14, lines 9-12; Fig. 1; page 6, line 20; pages 3 and 4, lines 14-15; *television* program recommendations).

Independent claim 18 recites a system for maintaining a user profile indicating preferences of a user (pg. 6, lines 14-34), comprising:

a memory (Fig. 1, memory 120) for storing computer readable code; a processor (Fig. 1, processor 115) operatively coupled to said memory (Fig. 1), said processor configured to:

partition a third party selection history into a plurality of clusters (pg. 3, lines 16-19 and 23-26; pg. 5, lines 17-21; pg. 7, lines 16-17; pg. 8, lines 8-11; pg. 9, lines 28-30; Fig. 5), wherein each cluster contains items that are closer to the mean of the cluster than any other cluster from among the plurality of clusters (pg. 3, lines 25-26; pg. 7, lines 17-19; pg. 9, lines 28-33),

receive a selection from said user of at least one of said clusters of similar items (pg. 3, lines 26-30; pg. 5, lines 30-34; pg. 6, lines 1-13; pg. 7, lines 19-23; pg. 12, lines 17-32; pg. 13, lines 1-17; Fig. 6); and

update said user profile using said selected clusters (pg. 3, lines 26-

31; pg. 5, lines 30-34; pg. 6, lines 1-13; pg. 7, lines 19-23; pg. 12, lines 17-32; pg. 13, lines 1-17; Fig. 4A, Fig. 4B, Fig. 6).

Independent claim 22 recites an article of manufacture for recommending one or more available items to a target user (pg. 6, lines 14-34), comprising:

a computer readable medium (Fig. 1, memory 120) having computer readable code means embodied thereon (Fig. 1, 450, 500, 600, 700), said computer readable program code means comprising:

- 1) a step to obtain a history of selecting one or more available items by at least one third party (pg. 3, lines 16-17; pg. 5, lines 17-21; Fig. 1);
- 2) a step to partition (500) a third party selection history into a plurality of clusters (pg. 3, lines 16-19 and 23-26; pg. 5, lines 17-21; pg. 7, lines 16-17; pg. 8, lines 8-11; pg. 9, lines 28-30; Fig. 5), wherein each cluster contains items that are closer to the mean of the cluster than any other cluster from among the plurality of clusters (pg. 3, lines 25-26; pg. 7, lines 17-19; p. 9, lines 28-33),
- 3) a step to modify (600) a target user's history of selecting said one or more available items with one or more third party clusters to produce a modified target user's history (pg. 3, lines 26-30; pg. 5, lines 30-34; pg. 6, lines 1-13; pg. 7, lines 19-23; pg. 12, lines 17-32; pg. 13, lines 1-17; Fig. 4A, Fig. 6);
- 4) a step to process (700, 715) the modified target user's history to generate a target user profile (pg. 3, lines 30-31; pg. 9, lines 11-19; Fig. 4B), wherein the modified history characterizes preferences of the target user as

modified to reflect the preference of the third party (pg. 3, lines 31-33);

5) a step to generate a recommendation score (700, 730) for at least one of said available items based on said target user's profile as modified by said third party selection history (pg. 4, lines 1-3; pg. 14, lines 1-9; Fig. 1, program recommendations 150).

Independent claim 23 recites an article of manufacture for maintaining a user profile indicating preferences of a user (pg. 6, lines 14-34), comprising:

a computer readable medium (Fig. 1, memory 120) having computer readable code means embodied thereon (Fig. 1, 450, 500, 600, 700), said computer readable program code means comprising:

a step to partition (500) a third party selection history into a plurality of clusters (pg. 3, lines 16-19 and 23-26; pg. 5, lines 17-21; pg. 7, lines 16-17; pg. 8, lines 8-11; pg. 9, lines 28-30; Fig. 5), wherein each cluster comprises a segment of tangible items that exhibit a characteristic similarity (pg. 3, lines 19-22) and, wherein each cluster contains items that are closer to the mean of the cluster than any other cluster from among the plurality of clusters (pg. 3, lines 25-26; pg. 7, lines 17-19; p. 9, lines 28-33).

a step to receive a selection (600) from said user of at least one of said plurality of clusters of similar items (pg. 3, lines 26-30; pg. 5, lines 30-34; pg. 6, lines 1-13; pg. 7, lines 19-23; pg. 12, lines 17-32; pg. 13, lines 1-17; Fig. 6);

a step to modify a target user's history (600) of selecting said one or

more available items with said selected third party clusters to produce a modified target user's history (pg. 3, lines 26-30; pg. 5, lines 30-34; pg. 6, lines 1-13; pg. 7, lines 19-23; pg. 12, lines 17-32; pg. 13, lines 1-17; Fig. 4A, Fig. 6);

a step to process the modified target user's history to generate a target user profile (pg. 3, lines 30-31; pg. 9, lines 11-19; Fig. 4B), wherein the modified history characterizes preferences of the target user as modified to reflect preferences of the third party (pg. 3, lines 31-33);

a step to generate a recommendation score (700) for at least one of said available items based on said target user's profile as modified by said third party selection history (pg. 4, lines 1-3; pg. 14, lines 1-9; Fig. 1, program recommendations 150).

# VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1 and 3-23 stand rejected under 35 U.S.C. 102(b) over U.S. Patent 5,758,257 to Herz.

### VII. ARGUMENT

- A. Claims 1 and 3-23 stand rejected under 35 U.S.C. 102(b) over Herz '257
- B. The Office has omitted one or more claimed elements and has not established *prima facie* that the claims are anticipated

#### MPEP 2131 states:

"A claim is anticipated only if *each and every element* as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The *identical invention* must be shown in as *complete detail* as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Claim 1, upon which claims 3-6 depend, recites a computerized method performed by a data processor for recommending one or more available items to a target user. Claim 1, among other steps, recites "partitioning a third party selection history into a plurality of clusters". The Office has not established prima facie that Herz '257 teaches "partitioning a third party selection history into a plurality of clusters". Thus, the Office has not made a prima facie showing that claim 1 is anticipated by Herz '257.

The Office first asserts that col. 5, lines 24-54, and col. 49, lines 1-20, of Herz teach the partitioning step (See Final Office Action, page 3, lines 1-2). Applicant respectfully disagrees.

According to col. 5, lines 24-28 of Herz '257, a customer may have multiple profiles for representing the customer's changing preferences at various times of the day and of the week. The customer profile creating step may include:

"clustering customer profiles for combinations of customers expected to view the video programs at a particular customer location at particular times on particular days." (emphasis added); See Herz, col. 5, lines 33-37.

As used in the context of Herz '257, the term "clustering" means combining

customer profiles of a plurality of customers who are expected to view the video program at a particular time. Thus, "clustered profiles" means combined customer profiles. This is evidenced by the following example in Herz '257:

"For example, the clustered profiles for a customer's residence may contain the *combined* profiles of Mom and Dad in the evening and the *combined* profiles of the children in the afternoon." (col. 5, lines 37-40)

This example explains that col. 5, lines 33-37 refer to clustering or *combining* the individual customer profiles of <u>both</u> Mom and Dad (i.e., Mom and Dad are a combination of customers and their individual customer profiles are thus combined) expected to view video programs at their residence (i.e., a particular location) in the evening (i.e., at a particular time).

This point is further illustrated by a discussion at col. 49, lines 11-18 (incidentally also cited by the Office), which reads as follows:

Also, since there is usually more than one television viewer in a household, it may be desirable to keep *multiple clusters* of preferences for one television. Those skilled in the art will appreciate that this may be handled in a manner similar to the different moods described above. For example, *the customer profiles of two or more customers may be combined*, with equal or unequal weightings, so that the video programming with content profiles strictly within the overlap area of the combined customer profiles will be preferred. In this manner, customers such as a husband and wife with very different preferences may be presented video programming options which are mutually agreeable. (emphasis added)

Furthermore, col. 34, lines 14-16 under the "C. Customer Clustering" heading explain that "Grouping customers *together* into customer clusters offers several

advantages" (emphasis added). In this context, "Grouping" clearly means "combining".

To summarize Herz '257, *clustered profiles* are created by wholly combining selected individual profiles in accordance with, for example, the time of day that the *customers to whom the profiles are associated with are expected to watch some video programming together* (emphasis added). Having established that Herz '257 <u>only</u> discloses *combining* the customer profiles of two or more customers (i.e., Mom and Dad), claim 1 cannot be anticipated because Herz '257 is missing, among other patentable features, "partitioning the third party selection history into a number of clusters, as recited in claim 1."

Additionally, the Office Action cites col. 49, lines 1-20 (*See* Final Office Action, page 3, lines 1-2). Col. 49, lines 11-18 are already addressed above. However, the remainder, and in particular, lines 1-6, disclose that a customer may adopt the profiles of other individuals or celebrities. However, this passage also does not mention partitioning the viewing history, whether belonging to another individual or to a celebrity, into sets of clusters (of the third party selection history).

The Office further states in the first paragraph on page 3 of the Final Office Action that "According to Applicant's specification, a partition is equivalent to a cluster" referring by footnote 1 to page 7, lines 16-20 of Applicant's specification. Applicant respectfully disagrees and submits that Applicant's specification is mischaracterized. The name of the game is semantics. Page 7, lines 16-20 state as follows:

The clustering process 500 partitions the third party viewing history 130 (the data set) into clusters, such that points (television programs) in one cluster are closer to the mean (centroid) of that cluster than any other cluster.

This passage does not mention and would not reasonably cause one to understand the passage as meaning "a partition is equivalent to a cluster", as asserted by the Office. The word "partition" as used by the Office, is a noun meaning "one of the parts of a whole", and is never used in Applicant's passage in that sense. Rather, Applicant's passage uses the word "partitions", which is a verb and indicates an act. The act is performed on a third party viewing history 130 (data set), resulting in clusters. In other words, according to the passage in Applicant's specification, a cluster is a result of the act of partitioning, and is therefore <u>not</u> an equivalent of the act of partitioning. Applicant specifically claims "partitioning", and Herz '257 only teaches "combining". It is believed that the Office mischaracterizes Applicant's specification as stating "a partition is equivalent to a cluster" in order to establish that the "clustering" used by Herz is equivalent to the claimed "partitioning" step.

The Office also states that "Herz teaches clustering (*i.e.* partitioning) the profiles of third party persons viewing history and combining the viewing profiles of two or more customers" (emphasis added). The Office cites col. 38, lines 1-55 in footnote 2 for the alleged teaching of "partitioning" and the Office cites col. 49, lines 1-20 in footnote 3 for the alleged teaching of "combining" the viewing profiles of two or more customers. The Office's position is inconsistent with its earlier citation (as discussed above) of col. 49, lines 1-20 allegedly teaching partitioning because the

Office also cites col. 49, lines 1-20 in footnote 3 as allegedly teaching combining. (see page 3 of Final Office Action and *compare* col. 49 reference at line 2 to col. 49 reference to footnote 3 of lines 4-7).

Furthermore, col. 38, lines 1-55 do not teach partitioning. Those lines only disclose clustering which is not the same as partitioning. Also, the "clustering" and "combining the viewing profiles of two or more customers," mentioned by the Office, is one and the same. The cited lines at col. 38 only teach determining initial profiles for new customers, a discussion which is actually started at col. 37, lines 64-67. Clustering is defined as a way of determining an initial customer profile (col. 38, lines 18-20). In one use of clustering, customers are grouped so that people have who have watched more movies or shows in common are more likely to be in the same group (col. 38, lines 42-47). Thus, customers and their respective customer profiles are combined as part of clustering. Customer profiles are combined rather than partitioned.

Col. 38, lines 5-12 refer to determining an initial customer profile by clustering movies watched into groups for selection of a centroid (average) of each group. Thus, this section discloses grouping together (i.e., combining in this context) movies watched and then averaging. Partitioning is not disclosed in these lines or anywhere else in col. 38.

MPEP 2131 clearly states that "the identical invention must be shown in as complete detail as is contained in the claims", and the Board of Patent Appeals and Interferences has consistently upheld this premise: "there must be no difference

between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention. Scripps Clinic & Research Found. v. Genentech, Inc., 927 F.2d 1565, 1576, 18 USPQ2d 1001, 1010 (Fed. Cir. 1991)." *Ex Parte Naoya Isoda*, Appeal No. 2005-2289, Application 10/064,508 (BPAI Opinion October 2005). Applicant respectfully maintains that one of ordinary skill in the art would view Herz's wholly combining customer profiles as being substantially different from partitioning as claimed in the claims.

Independent claims 14, 17, 22, and 23 have been rejected on the same grounds as claim 1 and are therefore patentable for at least the reasons described above.

Independent claim 7 is treated separately in the Office Action, but recites the same limitation of "partitioning a third party selection history into a plurality of clusters". Independent claim 18 is treated with claim 7, and similarly recites a "processor configured to: partition a third party selection history into a plurality of clusters". In this part of the Final Office Action (page 4, bottom paragraph), the only citation that seems of relevance is col. 34, lines 57-60, which reads "As noted above, the purpose of clustering is to group objects with high similarity into clusters." The term "group" means to combine in this context. Again, Herz '257 does not disclose "partitioning".

Dependent claims depending from independent claims 1, 7, 14, 17, 18, 22, and 23 are patentable for at least the same reasons as the independent claims.

C. Conclusion

In summary, the Office is believed to have mischaracterized Applicant's

specification and tries to rewrite Herz '257 as teaching partitioning, whereas Herz

'257 only teaches wholly combining customer profiles. This is gross error.

Because Herz '257 fails to teach or suggest "partitioning a third party selection

history into a plurality of clusters," Applicant respectfully requests that the

Examiner's rejection of claims 1 and 3-23 under 35 U.S.C. 102(b) be reversed by

the Board, and the claims be allowed to pass to issue.

The Commissioner is hereby authorized to credit any overpayment or

charge any fee (except the issue fee) to Account No. 14-1270.

Respectfully submitted,

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#### **CLAIMS APPENDIX**

Claim 1: A computerized method performed by a data processor for

recommending one or more available items to a target user, comprising the steps

of:

obtaining a history of selecting one or more available items by at least one

third party;

partitioning a third party selection history into a plurality of clusters, wherein

each cluster contains items that are closer to the mean of the cluster than any other

cluster from among the plurality of clusters,

modifying a target user's history of selecting said one or more available

items with one or more third party clusters to produce a modified target user's

history;

processing the modified target user's history to generate a target user profile,

wherein the modified target user's history characterizes preferences of the target

user as modified to reflect preferences of the third party;

generating a recommendation score for at least one of said available items

based on said target user's profile; and

displaying the recommendation score to the target user.

Claim 2 (canceled)

Claim 3: The method of claim 1, wherein said obtaining step further

comprises the step of receiving a user selection of one or more of said clusters of similar items.

Claim 4: The method of claim 1, wherein said one or more items are programs.

Claim 5: The method of claim 1, wherein said one or more items are content.

Claim 6: The method of claim 1, wherein said one or more items are products.

Claim 7: A computerized method performed by a data processor for maintaining a user profile indicating preferences of a user, comprising the steps of:

partitioning a third party selection history into a plurality of clusters, wherein each cluster contains items that are closer to the mean of the cluster than any other cluster from among the plurality of clusters,

receiving a selection from said user of at least one of said clusters of similar items; and

modifying said user profile using said user selected clusters.

Claim 8: The method of claim 7, wherein said user profile is associated with a program content recommender.

Claim 9: The method of claim 8, wherein said user profile indicates viewing

preferences of said user.

Claim 10: The method of claim 7, wherein said step of updating said user

profile further comprises the steps of updating a selection history of said user with

items from said selected clusters and updating said user profile using said updated

selection history.

Claim 11: The method of claim 7, wherein said one or more items are

programs.

Claim 12: The method of claim 7, wherein said one or more items are

content.

Claim 13: The method of claim 7, wherein said one or more items are

products.

Claim 14: A system for recommending one or more available items,

comprising:

a memory for storing computer readable code;

a processor operatively coupled to said memory, said processor configured

to:

(1) obtain a history of selecting one or more available items by at least

one third party;

(2) partitioning a third party selection history into a plurality of clusters,

wherein each cluster contains items that are closer to the mean of the cluster than

any other cluster from among the plurality of clusters,

(3) selecting one or more clusters from the third party selection

history;

(4) modifying the target user's history of selecting said one or more

available items with said selected one or more clusters from the third party selection

history to produce a modified target user's history;

(5) processing the modified target user's history to generate a target

user profile, wherein the modified target user's history characterizes preferences of

the target user as modified to reflect preferences of the third party,

(6) generating a recommendation score for at least one of said

available items based on said target user's profile; and

(7) displaying the recommendation score to the target user.

Claim 15: The system of claim 14, wherein said processor is further

configured to partition said third party selection history into clusters containing

similar items.

Claim 16: The system of claim 15, wherein said processor is further

configured to receive a user selection of one or more of said clusters of similar

items.

Claim 17: A system for recommending one or more available items,

comprising:

means for obtaining a history of selecting one or more available items by at

least one third party;

means for partitioning the at least one third party selection history into a

plurality of clusters, wherein each cluster contains items that are closer to the mean

of the cluster than any other cluster from among the plurality of clusters,

means for modifying a target user's history of selecting said one or more

available items with at least one cluster selected from the plurality of clusters

comprising the third party selection history to produce a modified target user's

history;

means for processing the modified user's history to generate a target user

profile, wherein the modified target user's history characterizes preferences of the

target user as modified to reflect preferences of the third party;

means for generating a recommendation score for at least one of said

available items based on said target user's profile as modified by said third parties'

history;

means for displaying the recommendation score to the target user.

Claim 18: A system for maintaining a user profile indicating preferences of a user, comprising:

a memory for storing computer readable code;

a processor operatively coupled to said memory, said processor configured to:

partition a third party selection history into a plurality of clusters, wherein each cluster contains items that are closer to the mean of the cluster than any other cluster from among the plurality of clusters,

receive a selection from said user of at least one of said clusters of similar items; and

update said user profile using said selected clusters.

Claim 19: The system of claim 18, wherein said user profile is associated with a program content recommender.

Claim 20: The system of claim 18, wherein said user profile indicates viewing preferences of said user.

Claim 21: The system of claim 18, wherein said step of updating said user profile further comprises the steps of updating a selection history of said user with

items from said selected clusters and updating said user profile using said updated

selection history.

Claim 22: An article of manufacture for recommending one or more available

items to a target user, comprising:

a computer readable medium having computer readable code means

embodied thereon, said computer readable program code means comprising:

1) a step to obtain a history of selecting one or more available items

by at least one third party;

2) a step to partition a third party selection history into a plurality of

clusters, wherein each cluster contains items that are closer to the mean of the

cluster than any other cluster from among the plurality of clusters,

3) a step to modify a target user's history of selecting said one or

more available items with one or more third party clusters to produce a modified

target user's history;

4) a step to process the modified target user's history to generate a

target user profile, wherein the modified history characterizes preferences of the

target user as modified to reflect the preference of the third party;

5) a step to generate a recommendation score for at least one of said

available items based on said target user's profile as modified by said third party

selection history.

Claim 23: An article of manufacture for maintaining a user profile indicating preferences of a user, comprising:

a computer readable medium having computer readable code means embodied thereon, said computer readable program code means comprising:

a step to partition a third party selection history into a plurality of clusters, wherein each cluster comprises a segment of tangible items that exhibit a characteristic similarity and, wherein each cluster contains items that are closer to the mean of the cluster than any other cluster from among the plurality of clusters,

a step to receive a selection from said user of at least one of said plurality of clusters of similar items;

a step to modify a target user's history of selecting said one or more available items with said selected third party clusters to produce a modified target user's history;

a step to process the modified target user's history to generate a target user profile, wherein the modified history characterizes preferences of the target user as modified to reflect preferences of the third party;

a step to generate a recommendation score for at least one of said available items based on said target user's profile as modified by said third party selection history.

# **EVIDENCE APPENDIX**

No evidence has been submitted that is relied upon by the appellant in this appeal.

# **RELATED PROCEEDINGS APPENDIX**

Appellant is not aware of any co-pending appeal or interference which will directly affect or be directly affected by or have any bearing on the Board's decision in the pending appeal.